



# MLDS CENTER

Maryland Longitudinal Data System

Address 550 West Baltimore Street  
Baltimore, MD 21201  
Phone 410-706-2085  
Email [mlds.center@maryland.gov](mailto:mlds.center@maryland.gov)  
Website [www.MLDSCenter.org](http://www.MLDSCenter.org)

## MEMORANDUM

**TO:** MLDS Governing Board

**FROM:** Ross Goldstein, Executive Director  
Angela Henneberger, Research Branch Director and Assistant Research Professor,  
University of Maryland School of Social Work

**DATE:** September 3, 2021

**SUBJECT:** External Researcher and Grant Funded Projects

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### **Purpose**

The purpose of this agenda item is to get Governing Board approval for two applications under the Policies and Procedures for External Researcher and Grant Funded Projects and to provide updates on previously approved projects.

### **Application #1**

Dr. Megean Garvin submitted an application for approval entitled: Computing Education and Certification Outcomes in Maryland.

### Project Abstract

The Maryland Center for Computing Education (MCCE) proposes to partner with the MLDS Center on a proposal to increase the ability of the Center and MCCE to examine computing industry certificates and their impact on education and workforce outcomes. The computing industry certificate data is a critical missing component in understanding how industry credential achievement impacts various aspects of workforce outcomes. Including this data will enable Maryland to be the first state to examine these outcomes longitudinally.

A key component of this project is to obtain data on individuals who have received computing industry certificates as authorized by the *Career Preparation and Expansion Act*. The goal is to identify industry certifiers, establish agreements for the collection of Maryland student-level certificate data, and then integrate the computing industry certificate data into the MLDS. Examples of industry certifiers include Microsoft/Certiport (with which an agreement has already been established), CompTIA, and Oracle. The grant will fund additional staffing at MLDS to speed up the planning and implementation of these new data from industry partners.

The new data will be used to develop research and analysis, such as general inquiries into developing a better understanding of when students achieve industry certificates, what additional education precedes the certificate attainment, and how the certificate impacts education and workforce outcomes, including time to first job and wages.

### Grant Funding

Dr. Garvin is actively pursuing funding opportunities for this project.

### Researchers

Dr. Megean Garvin, Maryland Center for Computing Education, University of Maryland Baltimore County

### Request for Approval

Governing Board approval for this application is recommended. Dr. Garvin has experience working with MLDS, and this project will provide funding to directly advance the Center's data collections under *Career Preparation Expansion Act*. Additionally, the project benefits the State by examining certifications, a topic of high priority to the State.

### **Application #2**

Dr Ting Zhang submitted an application for approval to use MLDS data for research on the following project: The Role of Digital Literacy Depth and Breadth in Relation to Workforce Outcomes in Maryland

### Project Abstract

In Maryland public schools, computing education was declared as a priority by the Governor in 2017 and introduced into legislation (HB281), signed by the Governor on May 8, 2018 (MSDE, 2018). Effective on June 1, 2018, the new legislation requires county boards to require public high schools to offer at least one high-quality computer science course beginning in the 2021-2022 school year and establishes the Maryland Center for Computing Education to identify ways to expand access to high-quality computer science education, strengthen the skills of educators, and increase the number of computer science teachers (Maryland General Assembly, 201). Subsequently, with rising popularity and a policy push, prior MCCE research shows that in 2018, 89% of high schools and 23% of high school graduates had computing courses, and most were admitted thereafter full-time in colleges (Garvin and Koerner, 2021). The current study builds on the prior MCCE examination of computing courses by further examining the depth and breadth of coursework and linking to future workforce outcomes in Maryland.

### Grant Funding

Dr. Zhang is applying for funding from the Russell Sage Foundation.

### Researchers

Dr. Ting Zhang, University of Baltimore

Dr. Laurie Schintler, George Mason University

### Request for Approval

Governing Board approval for this application is recommended. This is a topic that will further expand the Center's research on computing education and will help stakeholders better understand the depth and breadth of computing courses in Maryland.

### **Updates**

The Research Branch had the following grant submissions funded:

- (1) Examining recruitment programs and pathways to diversify the teacher workforce, Institute of Education Sciences (PI: David Blazar); \$577,149; September 2021 - August 2024
- (2) Education and experience: Do teacher qualifications in career-focused STEM courses make a difference? National Science Foundation (PI: David Blazar); \$449,670; August 2021 - July 2022

Additionally, an external research grant was awarded from the IES to Rachel Durham and Marc Stein in the amount of just under \$500,000. The title of the grant is *Postsecondary and Labor Market Effects of Career and Technical Education in Baltimore City Public Schools* and work will be completed July 2021 through June 2023.